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| APPLICATION NO.                            | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.        |  |
|--|----------------|----------------------|-------------------------|-------------------------|--|
| 09/848,048                                 | 05/03/2001     | John E. McGunnigle   | 102088-0001             | 5582                    |  |
| 24267 75                                   | 590 09/28/2004 |                      | EXAMINER                |                         |  |
| CESARI AND MCKENNA, LLP                    |                |                      | DAO, MINH D             |                         |  |
| 88 BLACK FALCON AVENUE<br>BOSTON, MA 02210 |                |                      | ART UNIT                | PAPER NUMBER            |  |
|  |                |                      | 2682                    |                         |  |
|  |                |                      | DATE MAILED: 09/28/2004 | DATE MAILED: 09/28/2004 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |  |  |  |
|--|--|---|--|--|--|
|  | 09/848,048   | MCGUNNIGLE, JOHN E.   |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |
| •  | MINH D DAO   | 2682  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | pears on the cover sheet with the c  | orrespondence address   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE. | nely filed<br>s will be considered timely.<br>the mailing date of this communication.<br>D (35 U.S.C. § 133). |  |  |  |
| Status   |  |   |  |  |  |
| 1) Responsive to communication(s) filed on 30 A  | <u>pril 2004</u> .   |   |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)□ This   | ∑ This action is FINAL. 2b) ☐ This action is non-final.  |   |  |  |  |
| 3) Since this application is in condition for alloward closed in accordance with the practice under E  |  |   |  |  |  |
| Disposition of Claims  |  |   |  |  |  |
| 4) Claim(s) is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or   | wn from consideration.   |   |  |  |  |
| Application Papers   | *  |   |  |  |  |
| 9)☐ The specification is objected to by the Examine  | er.  |   |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |  |   |  |  |  |
| Applicant may not request that any objection to the  | drawing(s) be held in abeyance. See  | e 37 CFR 1.85(a).   |  |  |  |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex  | •  |   |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list  | ts have been received.<br>ts have been received in Application<br>ty documents have been receive<br>u (PCT Rule 17.2(a)).  | ion No<br>ed in this National Stage   |  |  |  |
| Attachment(s)  |  | (   |  |  |  |
| 1) Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  A) Interview Summary (PTO-413)  Paper No(s)/Mail Date.  |  |   |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>   |  | ate Patent Application (PTO-152)  |  |  |  |

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,2,4-9,11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Henry (US Patent 5,590,396).

Regarding claim 1, Henry teaches a microwave communication network that overlays a public switched telephone network comprising (See figure 1; also see col. 3, lines 59-67 and col. 4, lines 1-19):

a plurality of microwave transceivers (Figure 1, item108A, 108B; In addition, items 108A and 108B each inherently includes a transceiver in order transmit and receive information) forming a microwave network (Figure 1, items 107,110, 113, 114 108A, 108) which overlays the public switched telephone network (Figure 1, items 105), the transceivers being geographically located so as to provide a wireless interoffice facility (IOF) between two or more central offices, tandem switches or other premises controlled by an incumbent local exchange carrier (ILEC) (Figure 1, items 107 via microwave link 108).

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Regarding claim 2, Henry teaches that the microwave communication network as in

claim 1 wherein one or more of the microwave transceivers is located proximate to one

or more of the central offices, tandem switches or other premises (See figure 1, the link

between items 108A(microwave facility) and 107(MTSO)).

Regarding claim 4, Henry teaches that the microwave communication network as in

claim 1 wherein the wireless IOF provides redundancy to the public switched telephone

network (Figure 1, links 117 and 108; col. 4, lines 8-12).

Regarding claim 5, Henry also inherently teaches that the microwave communication

network as in claim 1 wherein the wireless IOF provides bandwidth at a lower cost than

the public switched telephone network. It is well known to one of ordinary skill in the art

that the cost of providing wireless service in general is less than the cost to build up a

wireline network.

Regarding claim 6, the claim is interpreted the same as claim 5, therefore is rejected for

the same reason set forth in claim 5.

Regarding claim 7, Henry teaches a method of providing wireless bandwidth in a

microwave network (figure 1, items 107,110,114,106,108A, 108) which overlays a public

switched telephone network (figure 1, items 105) comprising the steps of (See figure 1,

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and it is also well known in the art that the microwave link 108 should operate within the FCC allocated wireless bandwidth):

- (1) forming a microwave network from a plurality of microwave transceivers (Figure 1, item108A, 108B; In addition, items 108A and 108B each inherently includes a transceiver in order transmit and receive information); the microwave network overlaying the public switched telephone network (See figure 1; also see col. 3, lines 59-67 and col. 4, lines 1-19);
- (2) geographically arranging the transceivers so as to provide wireless interoffice facility (1017) between two or more central offices, tandem switches or other premises controlled by an incumbent local a change carrier (ILEC) (Figure 1, items 107 via microwave link 108).

Regarding claim 8, Henry teaches a microwave communication network that overlays a public switched telephone network comprising (See figure 1; also see col. 3, lines 59-67 and col. 4, lines 1-19): a plurality of microwave transceivers (Figure 1, item108A, 108B; In addition, items 108A and 108B each inherently includes a transceiver in order transmit and receive information) forming a microwave network (Figure 1, items 107,110, 113, 114 108A, 108) which overlays the public switched telephone network (Figure 1, items 105), the transceivers being geographically located to provide a wireless interoffice facility (IOF) between one or more central offices, tandem switches or other premises controlled by an incumbent local exchange carrier (ILEC) (Figure 1, items 107 via microwave link 108) and one or more central offices, tandem switches or

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other premises controlled a common carrier other than the (ILEC) (Figure 1, items

103,102).

Regarding claim 9, Henry teaches that the microwave communication network as in

claim 8 wherein one or more of the microwave transceivers is located proximate to one

or more of the central offices, tandem switches or other premises (See figure 1, the link

between items 108A(microwave facility) and 107(MTSO)).

Regarding claim 11, Henry teaches that the microwave communication network as in

claim 8 wherein the wireless IOF provides redundancy to the public switched telephone

network (Figure 1, links 117 and 108; col. 4, lines 8-12).

Regarding claim 12, Henry also inherently teaches that the microwave communication

network as in claim 8 wherein the wireless IOF provides bandwidth at a lower cost than

the public switched telephone network. It is well known to one of ordinary skill in the art

that the cost of providing wireless service in general is less than the cost to build up a

wireline network.

Regarding claim 13, the claim is interpreted the same as claim 12, therefore is rejected

for the same reason set forth in claim 12.

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Regarding claim 14, Henry teaches a method of providing wireless bandwidth in a

microwave network (figure 1, items 107,110,114,106,108A,108) which overlays a public

switched telephone network (figure 1, items 105) comprising the steps of (See figure 1,

and it is also well known in the art that the microwave link 108 should operate within the

FCC allocated wireless bandwidth):

(1) forming a microwave network from a plurality of microwave transceivers

(Figure 1, item108A, 108B; In addition, items 108A and 108B each inherently includes a

transceiver in order transmit and receive information); the microwave network

overlaying the public switched telephone network (See figure 1; also see col. 3, lines

59-67 and col. 4, lines 1-19);

(2) geographically arranging the transceivers so as to provide wireless interoffice

facility (1017) between two or more central offices, tandem switches or other premises

controlled by an incumbent local a change carrier (ILEC) (Figure 1, items 107 via

microwave link 108) and one or more central offices, tandem switches or other premise

controlled by a common carrier other than the ILEC (figure 1, items 103,102).

Allowable Subject Matter

2. Claims 3 and 10 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

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Regarding claim 3, Henry (US Patent 5,590,396) teaches the limitations set forth in

claim 1. However, Henry fails to teach that the ILEC provides insufficient wireline

bandwidth between two or more of the central offices, tandem switches or other

premises, and the microwave network provides wireless bandwidth as an alternative

communication path.

Regarding claim 10, Henry (US Patent 5,590,396) teaches the limitations set forth in

claim 8. However, Henry fails to teach that the ILEC provides insufficient wireline

bandwidth between two or more of the central offices, tandem switches or other

premises, and the microwave network provides wireless bandwidth as an alternative

communication path.

Response to Arguments

1. Applicant's arguments filed on 04/30/2004 have been fully considered but they

are not persuasive.

Regarding the applicant's arguments on page 4 of the remarks:

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- a. Applicant argues that MTSOs 107 of Henry are not central offices.

  However, the examiner disagrees. According to Newton's Telecom Dictionary (19<sup>th</sup> updated and expanded edition), page 522, MTSO is a central office.
- b. Applicant argues that Henry does not disclose that his microwave equipment is geographically located so as to provide wireless bandwidth between two or more central offices. However, the examiner disagrees. It is well known in the art that the microwave equipment that link the two or more central offices together should be geographically oriented so that they would directly face each other for the benefit of providing the best performance regarding transmitting and receiving information to/from each other.
- c. Applicant argues that Henry's microwave link 108 carries only cellular traffic between the two MTSOs 107 and is not capable of carrying other types traffic normally carried by the PSTN. In response to this argument, it is noted that this limitation is not cited in any of the rejected claims.

## Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MINH D DAO whose telephone number is 703-305-

5589. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, VIVIAN C CHIN can be reached on 703-308-6739. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Minh Dao Art Unit 2682 September 23, 2004 MD